

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims**

Claim 1 (Currently Amended): A method for generating data for a data network with a telecommunications switch, the method comprising the steps of:

A) receiving a telephone call;

B) determining with the telecommunications switch whether the telephone call includes a first data transmission conforming to a predetermined data protocol, the first data transmission including a first digital information signal;

if the telephone call includes the first data transmission conforming to the predetermined data protocol, then:

C) terminating the predetermined data protocol with the telecommunications switch; and

D) demodulating the first digital information signal from the first data transmission.

Claim 2 (Original): The method of claim 1 further comprising the step of:

E) generating a transmit packet that includes the first digital information signal.

Claim 3 (Currently Amended): The method of claim 2 further comprising the step of:

F) transmitting the transmit packet into the data network.

Claim 4 (Original): The method of claim 2 wherein the telecommunications switch only generates the transmit packet when the first data transmission includes the first digital information signal.

Claim 5 (Currently Amended): The method of claim 1 further comprising the steps of:

E) receiving a receive packet from the a data network, the receive packet including a second digital information signal;

F) modulating the second digital information signal into a second data transmission conforming to the predetermined data protocol; and

G) transmitting the second data transmission in the telephone call.

Claim 6 (Original): The method of claim 1 wherein, if the telephone call does not include the first data transmission conforming to the predetermined data protocol, then the telecommunications switch transferring the telephone call to a telephone network.

Claim 7 (Original): The method of claim 1 wherein a digital signal processor analyzes the telephone call to determine whether the first data transmission conforms to the predetermined data protocol.

Claim 8 (Original): The method of claim 1 wherein the predetermined data protocol is one of a modem and a facsimile protocol.

Claim 9 (Original): The method of claim 1 wherein the step of determining whether the telephone call is the first data transmission comprises determining whether one of a called number and calling number for the telephone call is a predetermined number indicating a data call.

Claim 10 (Original): The method of claim 1 further comprising the steps of:

if the telephone call includes the first data transmission conforming to the predetermined data protocol, then:

E) translating a called number for the telephone call into a data network indicator; and  
F) establishing a first data connection to a data network based on the data network indicator.

Claim 11 (Original): The method of claim 10 further comprising the step of:

G) generating a transmit packet that includes the first digital information signal.

Claim 12 (Original): The method of claim 11 further comprising the step of:

H) transmitting the transmit packet into the data network.

Claim 13 (Original): The method of claim 10 further comprising the steps of:

G) receiving a receive packet from the data network, the receive packet including a second digital information signal;

H) modulating the second digital information signal into a second data transmission conforming to the predetermined data protocol;

I) transmitting the second data transmission in the telephone call.

Claim 14 (Currently Amended): A telecommunications switching system comprising:

an access circuit integral with the telecommunications switching system that receives telephone calls;

a data protocol analyzer coupled to the access circuit to determine whether telephone calls received from the access circuit include a first data transmission conforming to a predetermined data protocol, the first data transmission including a first digital information signal;

a data protocol terminator coupled to the access circuit to terminate the predetermined data protocol; and

a demodulator coupled to the access circuit to demodulate the first digital information signal from the first data transmission.

Claim 15 (Original): The system of claim 14 further comprising a data network interface coupled to the demodulator that generates a transmit packet that includes the first digital information signal.

Claim 16 (Original): The system of claim 15 wherein the data network interface receives a receive packet from a data network coupled to the data network interface, the receive packet including a second digital information signal.

Claim 17 (Original): The system of claim 16 further comprising:

a modulator coupled to the data network interface that generates a second data transmission conforming to the predetermined data protocol, the second data transmission including the second digital information signal.